



Instant Charge Battery System For Portable Electronic Devices

Abstract

The Instant Charge Battery System For Portable Electronic Devices is an energy storage and delivery device comprising of a capacitor portion for instantaneously capturing electrical energy from an external energy source for the purpose of charging a rechargeable battery, a charge circuit which transfers and regulates a charge current and a charge voltage from the capacitor to the battery, and a chargeable battery. The chargeable battery can be of any chargeable / rechargeable cell(s) such as, but not limited to, NiCad, NiMH or Lithium-ion. Once the Instant Charge Battery System For Portable Electronic Devices is connected to an external electrical energy source, the capacitor portion captures electrical energy within seconds – and then can be immediately disconnected from the external energy source – thereby eliminating the need for an extended period of time a portable electronic device must be connected to an external electrical energy source in order for its chargeable battery to charge.

U.S. Patent Documents

3288641	Nov. 1966	Rightmire	361/434.
3423642	Jan. 1969	Plehal et al.	361/434.
3538394	Nov. 1970	Bourgault et al.	361/434.
4830938	May 1989	McCullough et al.	429/210.
4900643	Feb. 1990	Eskra et al.	429/210.
5147739	Sep., 1992	Beard	429/194.
5200690	Apr. 1993	Uchida	320/106.
5439756	Aug. 1995	Anani et al.	429/9.
5604426	Feb. 1997	Okamura et al.	323/282.
5871859	Feb. 1999	Parise	429/7.
6057050	May 2000	Parise	429/7.
6326767	Dec. 2001	Small et al.	320/116.
6445936	Sep., 2002	Cannon et al.	455/573.
6476584	Nov. 2002	Sakakibara	320/150.

Foreign Patent Documents

59-14681	Jan. 1984	JP
1-03127	Apr. 1989	JP
1-920226	Jul. 1989	JP
10309002	Nov. 1998	JP
2000253508	Feb. 1999	JP
2000253503	Sep. 2000	JP
2002238108	Aug. 2002	JP
2003206838	Jul. 2003	JP